

WHAT IS CLAIMED IS

1. A two-tone isolator assembly adapted to be mounted on an
5 aircraft or equivalent comprising in particular a head, a cabin, a yoke
connected to the cabin and a power engine structure having a longitudinal
axis crossed by a radial plan, wherein said two-tone isolator assembly
comprises, located at the head side of the aircraft, at least one support for, at
least, one fluid mount isolator and two dynamic absorbers, and mechanical
10 means to couple said support to the power engine structure and to the cabin
yoke, said assembly being designed to link the fluid mount isolator at once to
said power engine structure and to said cabin yoke, whereas the dynamic
absorbers are only linked to the cabin structure, and wherein the dynamic
absorbers are supported to move in said radial plan of said power engine
15 structure.

2. A two-tone isolator assembly according to claim 1, wherein
a tuning to specific major tones is achieved by adjusting compression in the
dynamic absorbers and stiffness of the fluid mount isolators, the fluid isolators
being specifically directed to tune a lower major tone whereas the dynamic
20 absorbers are specifically directed to tune an upper major tone.

3. A two-tone isolator assembly according to claim 1, wherein
said isolator assembly comprises at least one support coupled to the cabin
yoke, the support comprising one transversal basic combination of a couple of
dynamic absorbers sandwiching a central fluid mount linked to said power
25 engine structure, the fluid mount housing having transversal shafts to mount
the dynamic absorbers

4. A two-tone isolator assembly according to claim 1, wherein
said isolator assembly comprises at least one support coupled to the cabin
yoke, which comprises two basic combinations, each combination comprising
30 a couple of dynamic absorbers sandwiching a central fluid mount linked to
said power engine structure.

5. A two-tone isolator assembly according to claim 1, wherein
the isolator assembly comprises dynamic absorbers consisting of hybrid
compounds of metallic alloy and resilient material.

35 6. A two-tone isolator assembly according to claim 5, wherein
the resilient material is rubber or elastomeric material.

7. A two-tone isolator assembly according to claim 5, wherein the metallic alloy is composed of a carbon - tungsten steel.

8. A two-tone isolator assembly according to claim 5, wherein the metallic alloy is bonded to a resilient washer.

5 9. A two-tone isolator assembly according to claim 8, wherein the metallic alloy forms a ring surrounding the resilient washer.

10. A two-tone isolator assembly according to claim 5, wherein the resilient washer is sandwiched between two metallic washers to tune the resilient washer by compression.